

**TRANSIMPEDANCE AMPLIFIER  
WITH CONTROLLABLE NOISE REDUCTION**

**ABSTRACT OF THE DISCLOSURE**

A transimpedance amplifier with controllable noise reduction in which DC offsets due to the input signal are tolerated during reception of low input signals by reducing, e.g., terminating, a compensation current to remove a dominant source of thermal noise, but compensated during reception of higher input signals where the effects of DC offsets are more dominant.